

**What is claimed is:**

1. A multimedia information releasing system for use in buildings, comprising:

a master transmitter, and

one or more slave receivers,

said master transmitter further comprising a power supply timing control module, a video source input module, a real-time information display module, a LCD display module, and a synchronous transmitting module,

said power supply timing control module providing a operating power supply to other modules in said master transmitter and controlling on-off state of each module in said master transmitter;

said video source input module decoding content stored in a storage medium or playback card and converting it into video signal and audio signal which are provided to said LCD display module;

said real-time information display module receiving various kinds of real-time information transmitted from a paging station and sending said information to said LCD display module;

said LCD display module determining functions of said real-time information sent from said real-time information display module, playing back said content stored in said storage medium or playback card, and displaying designated information;

said synchronous transmitting module transmitting a synchronous control signal to said slave receiver while controlling said LCD display module to display said content in said storage medium or playback card and said designated information,

each of said slave receivers further comprising a power supply timing control module, a video source input module, a real-time information display module, a LCD display module, and a synchronous receiving module,

said power supply timing control module providing a operating power supply to other modules in said slave receiver and controlling on-off state of

each module in said slave receiver;

said video source input module decoding content stored in a storage medium or playback card and converting it into video signal and audio signal which are provided to said LCD display module;

said real-time information display module receiving various kinds of real-time information transmitted from a paging station and sending said information to said LCD display module;

said LCD display module determining functions of said real-time information sent from said real-time information display module, playing back said content stored in said storage medium or playback card, and displaying designated information;

said synchronous receiving module receiving a synchronous control signal transmitted from said synchronous transmitting module in said master transmitter while controlling said LCD display module to display said content in said storage medium or playback card and said designated information.

2. The multimedia information releasing system for use in buildings according to claim 1, wherein said real-time information display module further comprising a RF receiving unit, a signal channel filtering unit, a Chinese standard word library unit, a LCD screen control board CPU unit, a character display unit and a control command unit,

said RF receiving unit receiving radio paging signal, and demodulating a high frequency signal to binary level signal which is sent to said signal channel filtering unit;

said signal channel filtering unit receiving and filtering said binary level signal, the filtered binary level signal is sent to said LCD screen control board CPU unit;

said LCD screen control board CPU unit deciding whether said binary level signal is a control signal or a display signal, if said binary level signal is a control signal, said control command unit further decides whether said control signal is used to control a on-off of said timer or to control said content played back from

said storage medium; if said binary level signal is a display signal, corresponding character dot array is extracted from said Chinese standard word library unit and transferred to said character display unit.

3. The multimedia information releasing system for use in buildings according to claim 1, wherein said synchronous transmitting module further comprising a infrared emitting unit, a MCU control unit, and a RF synchronous transmitting unit,

said MCU control unit simultaneously sending a high level trigger signal to said RF synchronous transmitting unit, and a level trigger signal to said IR emitting unit at a predetermined trigger time so that said IR emitting unit emits an infrared control signal outwards and said RF synchronous transmitting unit transmits a RF signal outwards.

4. The multimedia information releasing system for use in buildings according to claim 3, wherein said MCU control unit is an AT89C2051 single processor, and said RF synchronous transmitting unit transmits a RF signal with a peak power of 0.25W at an operation frequency of 315 MHz.

5. The multimedia information releasing system for use in buildings according to claim 1, wherein said synchronous receiving module further comprising a RF synchronous receiving unit and an IR emitting unit,

said RF synchronous receiving unit receiving said RF signal transmitted by said RF synchronous transmitting unit in said synchronous transmitting module, amplifying, mixing, amplifying and shaping said RF signal to produce a high level pulse signal, said high level pulse signal is sent to said IR emitting unit which emits a IR control signal outwards.

6. The multimedia information releasing system for use in buildings according to claim 1, wherein said video source input module is a DVD player or a flash memory card player.

7. The multimedia information releasing system for use in buildings according to claim 1, wherein said LCD display module mainly comprising a LCD control main board, a LCD screen, and an inverter,

said LCD control main board receiving and processing AV signal transferred from said DVD player or said flash memory card player, and then transferring said processed AV signal to said LCD screen to be displayed, said inverter inverting a DC voltage into a high voltage signal to drive a background light source of said LCD screen.

8. The multimedia information releasing system for use in buildings according to claim 7, wherein said LCD control main board further comprising a video decoding unit, a video processing unit, an audio processing unit, an IR control unit, and a microprocessor,

said video decoding unit decoding inputted video signal and real-time information, said video processing unit processing said decoded video signal and real-time information to produce a processed signal which is transferred to said LCD screen,

said audio processing unit processing inputted audio signal and transferring processed audio signal to a loudspeaker,

said IR control unit receiving a IR signal to trigger said microprocessor to control lightness and contrast and volume of the display.

9. A master transmitter in a multimedia information releasing system for use in buildings, comprising:

a power supply timing control module, a video source input module, a real-time information display module, a LCD display module, and a synchronous transmitting module,

said power supply timing control module providing a operating power supply to other modules in said master transmitter and controlling on-off state of each module in said master transmitter;

said video source input module decoding content stored in a storage medium or playback card and converting it into video signal and audio signal which are

provided to said LCD display module;

said real-time information display module receiving various kinds of real-time information transmitted from a paging station and sending said information to said LCD display module;

said LCD display module determining functions of said real-time information sent from said real-time information display module, playing back said content stored in said storage medium or playback card, and displaying designated information;

said synchronous transmitting module transmitting a synchronous control signal to said slave receiver while controlling said LCD display module to display said content in said storage medium or playback card and said designated information.

10. The master transmitter in a multimedia information releasing system for use in buildings according to claim 9, wherein said real-time information display module further comprising a RF receiving unit, a signal channel filtering unit, a Chinese standard word library unit, a LCD screen control board CPU unit, a character display unit and a control command unit,

said RF receiving unit receiving radio paging signal, demodulating a high frequency signal to binary level signal and transferring it to said signal channel filtering unit;

said signal channel filtering unit receiving and filtering said binary level signal, and transferring said filtered binary level signal to said LCD screen control board CPU unit;

said LCD screen control board CPU unit deciding whether said binary level signal is a control signal or a display signal, if said binary level signal is a control signal, said control command unit further decides whether said control signal is used to control a on-off of said timer or to control said content playback from said storage medium; if said binary level signal is a display signal, corresponding character dot array is extracted from said Chinese standard word library and transferred to said character display unit.

11. The master transmitter in a multimedia information releasing system for use in buildings according to claim 9, wherein said synchronous transmitting module further comprising a infrared emitting unit, a MCU control unit, a RF synchronous transmitting unit,

said MCU control unit simultaneously sending a high level trigger signal to said RF synchronous transmitting unit, and sending a level trigger signal to said IR emitting unit at a predetermined trigger time so that said IR emitting unit emits an infrared control signal outwards and said RF synchronous transmitting unit transmits a RF signal outwards.

12. The master transmitter in a multimedia information releasing system for use in buildings according to claim 11, wherein said MCU control unit is a AT89C2051 single processor, and said RF synchronous transmitting unit transmits said RF signal with a peak power of 0.25W at an operation frequency of 315 MHz.

13. The master transmitter in a multimedia information releasing system for use in buildings according to claim 9, wherein said video source input module is a DVD player or a flash memory card player.

14. The master transmitter in a multimedia information releasing system for use in buildings according to claim 9, wherein said LCD display module mainly comprising a LCD control main board, a LCD screen, and an inverter,

said LCD control main board receiving and processing AV signal transferred from said DVD player or said flash memory card player, and then transferring said processed AV signal to said LCD screen to display, said inverter inverts a DC voltage into a high voltage signal to drive a back light source of said LCD screen.

15. The master transmitter in a multimedia information releasing system for use in buildings according to claim 14, wherein said LCD control main board further comprising a video decoding unit, a video processing unit, an audio

processing unit, an IR control unit, and a microprocessor,

said video decoding unit decoding inputted video signal and real-time information, said video processing unit processing said decoded video signal and real-time information to produce a processed signal which is transferred to said LCD screen,

said audio processing unit processing inputted audio signal and transferring processed audio signal to a loudspeaker,

said IR control unit receiving a IR signal to trigger said microprocessor to control lightness and contrast and volume of the display.

16. A slave receiver in a multimedia information releasing system for use in buildings, comprising:

a power supply timing control module, a video source input module, a real-time information display module, a LCD display module, and a synchronous receiving module,

said power supply timing control module providing a operating power supply to other modules in said slave receiver and controlling on-off state of each module in said slave receiver;

said video source input module decoding content stored in a storage medium or playback card and converting it into video signal and audio signal which are provided to said LCD display module;

said real-time information display module receiving various kinds of real-time information transmitted from a paging station and sending said information to said LCD display module;

said LCD display module determining functions of said real-time information sent from said real-time information display module, playing back said content stored in said storage medium or playback card, and displaying designated information;

said synchronous receiving module receiving a synchronous control signal transmitted from said synchronous transmitting module in said master transmitter while controlling said LCD display module to display said content in said storage medium or playback card and said designated information.

17. The slave receiver in a multimedia information releasing system for use in buildings according to claim 16, wherein said real-time information display module further comprising a RF receiving unit, a signal channel filtering unit, a Chinese standard word library unit, a LCD screen control board CPU unit, a character display unit and a control command unit,

said RF receiving unit receiving radio paging signal, demodulating a high frequency signal to binary level signal and transferring it to said signal channel filtering unit;

said signal channel filtering unit receiving and filtering said binary level signal, and transferring said filtered binary level signal to said LCD screen control board CPU unit;

said LCD screen control board CPU unit deciding whether said binary level signal is a control signal or a display signal, if said binary level signal is a control signal, said control command unit further decides whether said control signal is used to control a on-off of said timer or to control said content playback from said storage medium; if said binary level signal is a display signal, corresponding character dot array is extracted from said Chinese standard word library and transferred to said character display unit.

18. The slave receiver in a multimedia information releasing system for use in buildings according to claim 16, wherein said synchronous receiving module further comprising a RF synchronous receiving unit and an IR emitting unit,

said RF synchronous receiving unit receiving said RF signal transmitted by said RF synchronous transmitting unit in said synchronous transmitting module, amplifying, mixing, amplifying and shaping said RF signal to produce a high level pulse signal, and transferring said high level pulse signal to said IR emitting unit which emits a IR control signal outward.

19. The slave receiver in a multimedia information releasing system for use in buildings according to claim 16, wherein said video source input module is a DVD player or a flash memory card player.



20. The slave receiver in a multimedia information releasing system for use in buildings according to claim 16, wherein said LCD display module mainly comprising a LCD control main board, a LCD screen, and an inverter,

said LCD control main board receiving and processing AV signal transferred from said DVD player or said flash memory card player, and then transferring said processed AV signal to said LCD screen to display, said inverter inverts a DC voltage into a high voltage signal to drive a back light source of said LCD screen.

21. The slave receiver in a multimedia information releasing system for use in buildings according to claim 20, wherein said LCD control main board further comprising a video decoding unit, a video processing unit, an audio processing unit, an IR control unit, and a microprocessor,

said video decoding unit decoding inputted video signal and real-time information, said video processing unit processing said decoded video signal and real-time information to produce a processed signal which is transferred to said LCD screen,

said audio processing unit processing inputted audio signal and transferring processed audio signal to a loudspeaker,

said IR control unit receiving a IR signal to trigger said microprocessor to control lightness and contrast and volume of the display.